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EXAMINER
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PATEL, ASHOKKUMAR B

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/829,564

Applicant(s)

SCHAEFER ET AL.

Examiner

Ashok B. Patel

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Application Number 09/829, 564 was filed on 04/10/2001. Claims 1-25 are subject to examination.

#### ***Response to Arguments***

2. Applicant's arguments filed 11/12/2004 have been fully considered but they are not persuasive for the following reasons:

##### **Applicant's argument:**

Neither Rinne nor Steele discloses transmission or reception of an information service wherein each of categories representing the information service are fragmented to create data fragments and at least one of the data fragments includes information that changes more frequently than information included in at least one other of the data fragments.

##### **Examiner's response:**

The reference Rinne teaches in col. 4, line 20-27, "The control means 104 prioritize and order the transmission table. The signalling management data comprised by the transmission table is placed in the transmission table according to the signalling need. Signalling that is important and vital to the subscriber terminal 200 is sent more frequently than less important signalling. The control means 104 reserve space for signalling management data in the transmission table according the signalling need of the data." Thus the reference teaches "whereby at least one of said data fragments includes information that changes more frequently than information included in at least one other of said data fragments."

Art Unit: 2154

***Claim Rejections - 35 USC § 102***

**3.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**4.** Claims 1, 2, 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Rinne (US 6, 549, 753).

**Referring to claim 1,**

The reference teaches a method to transmit an information service in a broadcast transmission system (Abstract, col.1, lines 8-13), characterized by the following steps:

performing a fragmentation within each of categories representing said information service to create data fragments (col.1, lines 46-53, lines 54-57), adding signalling information to every data fragment (col.1, lines 59-65), which signalling information allows a consistent reassembly of said data fragments at a receiver on basis of predefined protocol rules, to create respective broadcast objects, and transmitting said broadcast objects in an order according to an information content of said data fragment within said broadcast object. (col.2, lines 15-53).

whereby at least one of said data fragments includes information that changes more frequently than information included in at least one other of said

Art Unit: 2154

data fragments.(col. 4, line 20-27)

**Referring to claim 2,**

The reference teaches the method according to claim 1, characterized in that said fragmentation is performed dependent on the information content of the data to be transmitted. (col.1, lines 46-53, lines 54-57, col.2, lines 24-28).

**Referring to claim 22,**

The reference teaches broadcast transmission system is DAB (col.1, lines 54-67 and col.2, lines 1-12).

**Referring to claims 23 and 24,**

The reference teaches a method to receive an information service in a broadcast transmission system, characterized by the following steps:

receiving broadcast objects; extracting signalling information and a data fragment of every received broadcast object, which signalling information allows a consistent reassembly of said data fragments into an information category of said information service on basis of predefined protocol rules; and performing a defragmentation within each of categories representing said information service to create said information service; whereby at least one of said data fragments includes information that changes more frequently than information included in at least one other of said data fragments.(col. 4, line 20-27), in that said defragmentation is performed dependent on the information content of the data to be transmitted.(col.4, lines 46-65)

**Referring to claim 25,**

Art Unit: 2154

Claim 25 is a claim to a receiver for the method to receive an information service in a broadcast transmission system of claim 23. Therefore, claim 25 is rejected for the reasons set forth for claim 23.

### **Claim Rejections - 35 USC § 103**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rinne (US 6, 549, 753) in view of Steele et al. (hereinafter Steele) (Pub. No. US 2002/0046084)

#### **Referring to claim 3,**

Keeping in mind the teachings of the reference Rinne, managing signaling in broadcast transmission system such as DAB, as stated above, the reference fails to teach that a broadcast object is classified in dependency on the information content of the data fragment carried within a broadcast object, and a repetition rate of transmitting a broadcast object is dependent on its type. The reference Steele teaches broadcasting "The plurality of service or product options could include such things as location based services (roadside assistance, navigation, etc.), news updates, sports, weather, stock quotes, e-commerce transactions, web surfing minutes, discounts on products, frequent flier miles, free products (CD's, electronic equipment,

Art Unit: 2154

gasoline), etc. in exchange for the end user receiving ads (voice, text or other medium) to a communication device.” (page 6, [para.0110]). Also, as depicted in Fig. 5 of the reference, the reference clearly teaches that each broadcast object is classified in dependency on the information content of the data fragment carried within a broadcast object, and a repetition rate of transmitting a broadcast object is dependent on its type, such as weather, sports, news stocks.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Rinne by applying the classification technique of Steele to the broadcast object, as depicted in Fig.5, in dependency on the information content of the data fragment carried within a broadcast object, since this allows any AM, FM, TV, or digital audio broadcast or any internet audio broadcast to be easily selected by format as taught by Steele.

**Referring to claim 4,**

Keeping in mind the teachings of the reference Rinne, managing signaling in broadcast transmission system such as DAB, as stated above, the reference fails to teach that information service comprises a structure with three layers, namely service which provides information considered useful for a user when choosing a service among several others; category which links several items: and item which carries the information the user is interested in. The reference Steele teaches broadcasting “The plurality of service or product options could include such things as location based services (roadside assistance, navigation, etc.), news updates, sports, weather, stock quotes, e-commerce transactions, web surfing minutes, discounts on

Art Unit: 2154

products, frequent flier miles, free products (CD's, electronic equipment, gasoline), etc. in exchange for the end user receiving ads (voice, text or other medium) to a communication device." (page 6, [para.0110]). Also, as depicted in Fig. 5 of the reference, the reference clearly teaches that the information service comprises a structure with three layers, namely service which provides information considered useful for a user when choosing a service among several others (Fig.5, elements namely :Music, Talk, TV, Directory, Information); category which links several items (Fig.5, elements namely :Rock, Jazz, Country, weather) and item which carries the information the user is interested in (Fig.5, elements namely: Phoenix, Chicago). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Rinne by applying the classification technique of Steele to the broadcast object, as depicted in Fig.5, in dependency on the information content of the data fragment carried within a broadcast object, since this allows any AM, FM, TV, or digital audio broadcast or any internet audio broadcast to be easily selected by format as taught by Steele.

**Referring to claims 5 and 6,**

Keeping in mind the teachings of the reference Rinne, managing signaling in broadcast transmission system such as DAB, as stated above, the reference fails to teach that said fragmentation divides a category horizontally in at least two groups by building groups of item attributes of items of said category according to an importance of said item attributes, and in that four groups of item attributes are build, namely: a core attributes group which covers a set of the



Art Unit: 2154

most important attributes, which should be available in a terminal first on average; a dynamic attributes group which are likely to change with a higher frequency than other attributes; a main attributes group which covers all remaining item attributes; and a referenced attributes group which consists of attributes belonging to one of the other three attribute groups which are included therein as reference only and to be transmitted separately, e.g. because they comprise a high amount of data. The reference Steele teaches broadcasting "The plurality of service or product options could include such things as location based services (roadside assistance, navigation, etc.), news updates, sports, weather, stock quotes, e-commerce transactions, web surfing minutes, discounts on products, frequent flier miles, free products (CD's, electronic equipment, gasoline), etc. in exchange for the end user receiving ads (voice, text or other medium) to a communication device." (page 6, [para.0110]). Also, as depicted in Fig. 5 of the reference, the reference clearly teaches that fragmentation divides a category horizontally in at least two groups, namely Weather and Phoenix, Chicago and Honolulu. By referring to Fig.5, the reference clearly teaches the inherent four groups of item attributes such as Weather location as being Phoenix (a core attributes group which covers a set of the most important attributes, which should be available in a terminal first on average;); the data is repetitively transmitted as the weather data changes (a dynamic attributes group which are likely to change with a higher frequency than other attributes;) any other related information such as emergency contact phone numbers of local police (a main attributes group which covers all remaining item attributes), the

Art Unit: 2154

data attribute allowing the weather report audio stream on audio channel (and a referenced attributes group which consists of attributes belonging to one of the other three attribute groups which are included therein as reference only and to be transmitted separately, e.g. because they comprise a high amount of data.) Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Rinne by applying the classification technique of Steele to the broadcast object, as depicted in Fig.5, in dependency on the information content of the data fragment carried within a broadcast object, since this allows any AM, FM, TV, or digital audio broadcast or any internet audio broadcast to be easily selected by format as taught by Steele.

**Referring to claims 7 and 8,**

Keeping in mind the teachings of the reference Rinne, managing signaling in broadcast transmission system such as DAB, as stated above, the reference fails to teach said fragmentation divides at least parts of a category vertically by building groups of items of said category according to a logical membership of said items and that two types of broadcast objects are defined, namely: item subset directory containing information about all items which are transmitted in a predefined format; and item subset containing item data of a predefined format. The reference Steele teaches broadcasting "The plurality of service or product options could include such things as location based services (roadside assistance, navigation, etc.), news updates, sports, weather, stock quotes, e-commerce transactions, web surfing minutes, discounts on products, frequent flier miles, free products (CD's, electronic equipment, gasoline), etc. in exchange

Art Unit: 2154

for the end user receiving ads (voice, text or other medium) to a communication device." (page 6, [para.0110]). Also, as depicted in Fig. 5 of the reference, the reference clearly teaches that fragmentation divides at least parts of a category vertically by building groups of items of said category according to a logical membership of said items (Fig.5, elements namely: Rock and Jazz) and that two types of broadcast objects are defined, namely: item subset directory containing information about all items which are transmitted in a predefined format; and item subset containing item data of a predefined format. (Fig.5, elements namely: WINS, WNEW and KSAN and WORL and so on.) Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Rinne by applying the classification technique of Steele to the broadcast object, as depicted in Fig.5, in dependency on the information content of the data fragment carried within a broadcast object, since this allows any AM, FM, TV, or digital audio broadcast or any internet audio broadcast to be easily selected by format as taught by Steele.

**Referring to claims 9 and 10,**

Keeping in mind the teachings of the reference Rinne, managing signaling in broadcast transmission system such as DAB, as stated above, the reference fails to teach that that six types of broadcast objects are defined, namely: service directory containing elementary information about a service; category directory containing a complete list of all categories within a service; item directory containing all core attributes of all items of a category; item dynamic data list containing the dynamic attributes of at least a group of items; item main data list

Art Unit: 2154

containing the main attributes of at least a group of items; and referenced attributes containing one referenced attribute of one item, and that the signalling information of a service directory broadcast object comprises a protocol version attribute to enable a receiving terminal to check protocol compatibility between the broadcast service and a processing unit in the terminal. The reference Steele teaches broadcasting "The plurality of service or product options could include such things as location based services (roadside assistance, navigation, etc.), news updates, sports, weather, stock quotes, e-commerce transactions, web surfing minutes, discounts on products, frequent flier miles, free products (CD's, electronic equipment, gasoline), etc. in exchange for the end user receiving ads (voice, text or other medium) to a communication device." (page 6, [para.0110]). Also, as depicted in Fig. 5 of the reference, the reference clearly teaches six types of broadcast objects are defined, namely: service directory containing elementary information about a service (Fig.5, element namely Information); category directory containing a complete list of all categories within a service (Weather and Stocks) ; item directory containing all core attributes of all items of a category (Phoenix, Chicago and so on.) ; item dynamic data list containing the dynamic attributes of at least a group of items (inherent characteristic of the item Phoenix weather) ; item main data list containing the main attributes of at least a group of items (inherent characteristic of the item Phoenix such as any other related information such as emergency contact phone numbers of local police); and referenced attributes containing one referenced attribute of one item (the data attribute allowing the weather report audio stream on audio channel). The

Art Unit: 2154

reference also teaches "The two types of channels preferably available are audio broadcasts (e.g., AM, FM, TV, digital, Internet audio broadcasts and recorded material) and personal information services (e.g., navigation, email, traffic alerts, etc.). Channels are organized in a hierarchy 158 so any one can be easily selected on screen (see FIG. 2).( the signalling information of a service directory broadcast object comprises a protocol version attribute to enable a receiving terminal to check protocol compatibility between the broadcast service and a processing unit in the terminal.). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Rinne by applying the classification technique of Steele to the broadcast object, as depicted in Fig.5, in dependency on the information content of the data fragment carried within a broadcast object, since this allows any AM, FM, TV, or digital audio broadcast or any internet audio broadcast to be easily selected by format as taught by Steele.

**Referring to claims 11, 12 and 13,**

The reference Rinne teaches "The DAB system is used for the transmission of various services. The services may be e.g. audio or data services. The services may be transmitted e.g. across a fixed PSTN network (Public Switched Telephone Network) and a radio channel to a mobile receiver, for example, in broadcast mode. For efficient transmission of various services, the DAB system has to use efficient data management and signalling methods." (col.1, lines 46-53). The reference teaches a method the signalling is placed in a signal to be transmitted on the basis of control information that is separate from the data, the

Art Unit: 2154

control information being used for managing the signalling. (col.2, lines 20-24).

The reference specifically fails to specifically teach that the signalling information of a broadcast object comprises a type attribute indicating a classification of said broadcast object, and/or an ID attribute to distinguish several broadcast objects of a same type of broadcast objects, and/or a version attribute to indicate a change of a certain broadcast object, and that a reference to a referenced attribute comprises the ID of the broadcast object carrying the referenced attribute and a version attribute of the referenced broadcast object, and that in case of an update of a referenced attribute the version attribute of the referenced attribute object and the version of the attribute reference change, or the reference changes by exchanging the identifier and using the version information of the newly referenced attribute. The reference Steele teaches broadcasting "The plurality of service or product options could include such things as location based services (roadside assistance, navigation, etc.), news updates, sports, weather, stock quotes, e-commerce transactions, web surfing minutes, discounts on products, frequent flier miles, free products (CD's, electronic equipment, gasoline), etc. in exchange for the end user receiving ads (voice, text or other medium) to a communication device." (page 6, [para.0110]). Also, as depicted in Fig. 5 of the reference, the reference clearly teaches that the broadcast object comprises a type attribute indicating a classification of said broadcast object, (Fig. 5, element namely: Weather) and/or an ID attribute to distinguish several broadcast objects of a same type of broadcast objects, (Fig.5, element namely: Phoenix, Chicago) and/or a version attribute to indicate a change of a certain

Art Unit: 2154

broadcast object (inherent to the weather information category (broadcast object) as these services are provided based on the location.) The reference also teaches that a reference to a referenced attribute comprises the ID of the broadcast object carrying the referenced attribute (Fig.5, element namely: Weather) and a version attribute of the referenced broadcast object (inherent to the weather information category (broadcast object) as these services are provided based on the location.) and that in case of an update of a referenced attribute the version attribute of the referenced attribute object and the version of the attribute reference change, or the reference changes by exchanging the identifier and using the version information of the newly referenced attribute (inherent to the weather information category (broadcast object) as these services are provided based on the location.). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Rinne by applying the classification technique of Steele to the broadcast object, as depicted in Fig.5, in dependency on the information content of the data fragment carried within a broadcast object, since this allows any AM, FM, TV, or digital audio broadcast or any internet audio broadcast to be easily selected by format as taught by Steele.

**Referring claims 14 and 15,**

Keeping in mind the teachings of the reference Rinne, managing signaling in broadcast transmission system such as DAB, as stated above, the reference fails to teach that the item core attributes group, the item main attributes group and the item dynamic attributes group each comprise an own version attribute

Art Unit: 2154

which indicates an information update whenever an item attribute value or an item attribute cardinality of the respective item attributes group changes and that a broadcast object comprising an item of the item core attributes group and of the item directory carries all three version attributes, a broadcast object comprising an item of the item main attributes group carries a main version attribute, and a broadcast object comprising an item of the item dynamic attributes group carries a dynamic version attribute. The reference Steele teaches broadcasting "The plurality of service or product options could include such things as location based services (roadside assistance, navigation, etc.), news updates, sports, weather, stock quotes, e-commerce transactions, web surfing minutes, discounts on products, frequent flier miles, free products (CD's, electronic equipment, gasoline), etc. in exchange for the end user receiving ads (voice, text or other medium) to a communication device." (page 6, [para.0110]). Also, as depicted in Fig. 5 of the reference, the reference clearly teaches that the item core attributes group ( Fig.5, element namely: Phoenix ), the item main attributes group and the item dynamic attributes group each comprise an own version attribute which indicates an information update whenever an item attribute value or an item attribute cardinality of the respective item attributes group changes (this characteristic is inherent to the weather information (broadcast object) category as these services are provided based on the location.), and that a broadcast object comprising an item of the item core attributes group (Fig.5, elements namely: Phoenix, Chicago, Honolulu) and of the item directory carries all three version attributes, a broadcast object comprising an item of the item main



Art Unit: 2154

attributes group carries a main version attribute, and a broadcast object comprising an item of the item dynamic attributes group carries a dynamic version attribute. (these characteristics are inherent to the weather information category (broadcast object) as these services are provided based on the location.) Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Rinne by applying the classification technique of Steele to the broadcast object, as depicted in Fig.5, in dependency on the information content of the data fragment carried within a broadcast object, since this allows any AM, FM, TV, or digital audio broadcast or any internet audio broadcast to be easily selected by format as taught by Steele.

**Referring to claims 16, 17, 18, 19 and 20,**

Keeping in mind the teachings of the reference Rinne, managing signaling in broadcast transmission system such as DAB, as stated above, the reference fails to teach that the item directory comprises a version attribute which indicates an update whenever an item set comprising all core attributes of all items of a category changes or the vertical fragmentation changes, and that the item main data list and the item dynamic data list respectively comprise a version attribute which indicates an update whenever a respective item subset comprising the respective main or dynamic attributes of at least a group of items changes or the vertical fragmentation changes, and that the category directory comprises a version attribute which indicates an update whenever a category directory attribute value or a category attribute cardinality changes, and that the category directory comprises a version attribute which indicates an update whenever a

Art Unit: 2154

category set comprising a complete list of all categories within a service changes, and that the service directory comprises a version attribute which indicates an update whenever the protocol version attribute or a service attribute changes. The reference Steele teaches broadcasting "The plurality of service or product options could include such things as location based services (roadside assistance, navigation, etc.), news updates, sports, weather, stock quotes, e-commerce transactions, web surfing minutes, discounts on products, frequent flier miles, free products (CD's, electronic equipment, gasoline), etc. in exchange for the end user receiving ads (voice, text or other medium) to a communication device." (page 6, [para.0110]). Also, as depicted in Fig. 5, the reference teaches the availability of category of services such as weather and the services that are location based which are updated by onboard global positioning.(Abstract).

Thereby, it is the inherent characteristic of the system taught by the reference Steele that any change in services and relevant attributes are depicted.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Rinne by applying the classification technique of Steele to the broadcast object, as depicted in Fig.5, in dependency on the information content of the data fragment carried within a broadcast object, since this allows any AM, FM, TV, or digital audio broadcast or any internet audio broadcast to be easily selected by format as taught by Steele.

**Referring to claim 21,**

The reference Rinne teaches "The DAB system is used for the transmission of various services. The services may be e.g. audio or data services. The services

Art Unit: 2154

may be transmitted e.g. across a fixed PSTN network (Public Switched Telephone Network) and a radio channel to a mobile receiver, for example, in broadcast mode. For efficient transmission of various services, the DAB system has to use efficient data management and signalling methods." (col.1, lines 46-53). The reference teaches a method the signalling is placed in a signal to be transmitted on the basis of control information that is separate from the data, the control information being used for managing the signalling. (col.2, lines 20-24). The reference specifically fails to specifically teach that the signalling information of a broadcast object carrying a fragment of a category comprises a category ID attribute which specifies uniquely an information category and attributes which allow the defragmentation of the category. The reference Steele teaches broadcasting "The plurality of service or product options could include such things as location based services (roadside assistance, navigation, etc.), news updates, sports, weather, stock quotes, e-commerce transactions, web surfing minutes, discounts on products, frequent flier miles, free products (CD's, electronic equipment, gasoline), etc. in exchange for the end user receiving ads (voice, text or other medium) to a communication device." (page 6, [para.0110]). Also, as depicted in Fig. 5 of the reference, the reference clearly teaches that the signalling information of a broadcast object carrying a fragment of a category comprises a category ID attribute which specifies uniquely an information category and attributes which allow the defragmentation of the category. (Fig.5, element Information). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Rinne by

Art Unit: 2154

applying the classification technique of Steele to the broadcast object, as depicted in Fig.5, in dependency on the information content of the data fragment carried within a broadcast object, since this allows any AM, FM, TV, or digital audio broadcast or any internet audio broadcast to be easily selected by format as taught by Steele.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 8:00am-5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964.

Art Unit: 2154

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp  
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 JOHN POLLANSDEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100